

March 1896.

Mr. Tebbutt, R Carinæ.

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variables is not distinctly marked, and thus the determination of a point of reference depends a good deal upon the observer.

By far the better mode of determination is to compare light curves by superposition. By this method the period depends, not upon two or three isolated observations, but upon every observation made.

It was by this method, by comparing the curve (fig. 1) during March, April, May with that during June, July, August, that the period of *T Centauri* (91.2 days) given in this paper was arrived at.

Lovedale :

January 1896.

Observations of the Variable Star R Carinæ from 1890 December to 1895 August. By John Tebbutt.

In volumes xlv., xlvi., and li. of the Society's *Monthly Notices* comparisons of *R Carinæ* were published by me extending from 1880 May to 1890 June. Since the latter year I have been unable to keep up continuous observations of this interesting variable; still, scattered as the comparisons are, they may in combination with others—notably those made by Mr. A. W. Roberts, of South Africa—serve to throw light on its variations since 1890. I therefore enclose my results from 1890 December to August of the current year. While the variable was visible to the naked eye comparison stars were taken from the *Uranometria Argentina*. When the variable was telescopic the list of comparison stars employed was that given in *Monthly Notices*, vol. xlv. p. 17. It will be seen that the comparisons in 1891, 1892, 1894, and 1895 are sufficiently frequent to enable us to determine pretty accurately the maxima for those years. It also appears from a comparison of the observations made at Cordoba in 1871 with those made at Windsor in 1895 that the mean period of the star's variations from maximum to maximum is about 311 days, or about a day less than that which I deduced from observations down to 1886. I may here remark that there is a misprint on page 16 of the forty-fourth volume of the *Notices*, which I believe has not yet been corrected. The concluded magnitude opposite to 1882 December 12 should be 8.6 instead of 9.8.

Concluded Magnitudes of R Carinæ.

Date.	Mag.	Date.	Mag.	Date.	Mag.
1890 Dec. 30	8.0	1892 Jan. 31	5.7	1895 Apr. 4	6.9
1891 Jan. 12	7.0	Feb. 7	5.8	14	5.7
Feb. 7	5.6	19	6.3	21	5.5
11	5.5	Mar. 1	6.4	25	5.5
17	5.6	10	6.4	30	5.4
21	5.5	25	6.6	May 2	5.4
27	5.5	May 31	9.1	6	5.3
Mar. 3	5.6	Dec. 21	6.2	11	5.2
8	5.5	1893 Apr. 10	9.2	13	5.1
16	5.6	1894 Apr. 2	8.9	16	5.2
21	5.7	June 26	6.1	1	5.3
30	5.8	30	6.1	21	5.4
Apr. 6	5.9	July 7	5.7	25	5.5
10	5.9	15	5.8	26	5.6
17	6.0	20	5.9	29	5.7
21	6.3	28	6.0	June 3	5.8
30	6.4	Aug. 4	6.3	8	5.9
May 5	6.5	18	6.9	11	6.1
17	6.7	24	7.3	16	6.3
18	6.9	1895 Feb. 13	8.6	19	6.3
June 3	8.0	18	8.5	24	6.5
Dec. 30	5.3	27	8.3	27	6.5
1892 Jan. 2	5.3	Mar. 8	8.2	July 9	6.9
15	5.5	19	7.7	25	8.0
21	5.6	25	7.6	Aug. 21	8.5
24	5.6				

The Peninsula, Windsor, N.S. Wales :
1895 December 8.

Results of Double-star Measures with the 8-inch Equatorial at Windsor, New South Wales, in 1895.
By John Tebbutt.

Ref. No.	Star.	Observed Magnitudes.	R. A.	Approx. Place of Star 1895 ^o . Dec. S.	Fraction of Year.	Position of Angle.	No. of Obs.	Distance.	No. of Obs.	Mag. Power.	Eyes.	h m	h m	Hour-angles.	Weight, 1 to 5
1	<i>p</i> Eridani	6, 6	h 1 36	56° 44'	.830	225° 5'	10	7.64"	8	300	R	3 4	3 4	2 31 E	3
2	"	...	"	"	.871	223° 5'	10	...	...	300	P	0 53	0 53	0 35 E	4
3	"	...	"	"	.931	225° 1'	10	...	...	300	R	0 37	0 37	0 17 E	3
4	"	...	"	"	.936	222° 6'	10	7.41"	6	300	P	1 13	1 13	0 42 E	2
5	"	6, 6	"	"	.977	225° 1'	10	7.61"	6	300	R	3 25	3 25	3 53 W	4
6	"	6, 6	"	"	.983	224° 4'	10	7.41"	6	300	R	1 12	1 12	1 37 W	3
7	"	6, 6	"	"	.988	224° 8'	10	7.38"	7	300	R	2 9	2 9	2 39 W	3
8	"	6, 6	"	"	.997	225° 3'	10	7.35"	7	300	R	2 17	2 17	2 40 W	4
9	Lacaille 2145	6, 6	6 2	48° 27'	.257	28° 5'	10	1.55"	4	300	P	3 0	3 0	3 37 W	4
10	"	6, 6	"	"	.260	29° 7'	10	1.86"	7	300	P	3 6	3 6	3 35 W	5
11	"	...	"	"	.263	29° 3'	6	...	...	300	P	3 54	3 54	4 23 W	3
12	"	...	"	"	.266	30° 2'	10	...	...	300	P	3 46	3 46	4 1 W	4
13	"	...	"	"	.301	30° 6'	10	...	...	300	P	3 59	3 59	4 22 W	3
14	"	7, 7	"	"	.304	31° 4'	10	1.50"	6	300	P	3 41	3 41	4 9 W	4
15	Stone 4019	6, 8	7 54	47° 36'	.266	27° 5'	10	0.8"	Est.	300	P	2 21	2 21	2 52 W	3
16	δ Argus	3, 6	8 42	54° 19'	.285	156° 1'	8	...	...	535	...	1 38	1 38	1 10 E	